

# LOCATION SYSTEM USING RETRANSMISSION OF IDENTIFYING INFORMATION

## Abstract of Disclosure

A location system and method for determining the location of a tagged item in a facility. In one embodiment, the location system includes a plurality of room transmitters designed to be located throughout the facility. Each room transmitter has a unique signature. The system also includes at least one item or location tag affixed or otherwise associated with an item. Each tag is operable to send a signal having information related to the signature of a room transmitter within the reception range of the tag and information related to the identity of the tag. Signals from the tags are received by one or more locating receivers. Each locating receiver is operable to determine the identity of an item tag and the likely location of the item tag within the facility based upon the signal from that tag. The invention also provides a method of locating an item in a facility. In one embodiment, the method includes positioning room transmitters in multiple areas within a facility; configuring each room transmitter to generate a unique signature; fitting items with a tag; configuring each tag to generate a signal having a location portion and a signature portion; positioning a locating receiver within the facility; and determining the likely location and identity of that tag based on the tag's signal.

US661661 051001